# Serial ATA PCI RAID Quick Installation Guide

## Introducing the *Serial ATA PCI RAID*

The *Serial ATA PCI RAID* is an ultra high-speed two channel Serial ATA controller board for use in Pentium-class computers. It achieves burst data transfer rates up to 150MB/s (1.5Gb/s) and supports various brands of hard disk drives with capacities greater that 137GB.

### Features and Benefits

- Increased performance and security with Serial ATA RAID
- Supports 32-bit wide PCI bus at 66MHz and data transfer rates up to 1.5Gb/s (150MB/s)
- Supports RAID 0 (stripe) for performance and RAID 1 (mirror) for data reliability
- Compliant with Serial ATA 1.0 and PCI 2.2 specifications
- Coexists with on-board controller
- Features independent 256-byte FIFOs per channel for host reads and writes
- Feature Watch Dog timer for fault resiliency and flash memory for future BIOS updates
- Breaks the 137GB barrier! Works with various brands of large capacity Serial ATA hard disks

## System Requirements

- Pentium or equivalent PC with an available PCI slot
- Windows® 7 (32-/64-bit) / Vista (32-/64-bit) / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit) / Server 2008 R2 / 2000 / ME / 98SE

## Package Contents

- *Serial ATA PCI RAID* board
- 2 Serial ATA data cables
- Dual Connector Serial ATA power cable
- "Y" split power cable
- Driver software and user's manual

## Layout

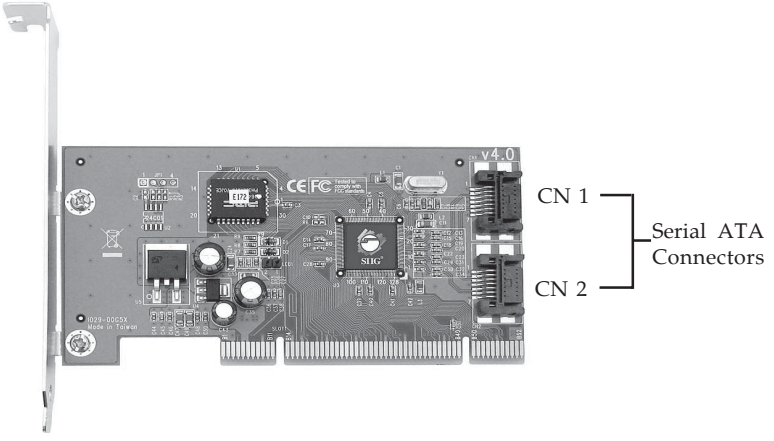


**Figure 1: Serial ATA PCI RAID layout**

## Hardware Installation

General instructions for installing the card are provided below. Since the design of computer cases and motherboards vary, refer to your computer's reference manual for further information, if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer's case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

1. Turn OFF the power to your computer and any other connected peripheral devices.
2. Unplug the power cord from the back of the computer.
3. Remove your computer cover.
4. Remove the slot bracket from an available PCI slot.
5. To install the card, carefully align the card's bus connector with the selected PCI slot on the motherboard. Push the board down firmly, but gently, until it is well seated.
6. Replace the slot bracket holding screw to secure the card.
7. Now go to **Device Connection** to connect your Serial ATA hard disk drives.

### Device Connection

The *Serial ATA PCI RAID* is a two channel Serial ATA controller that supports up to two Serial ATA hard disk drives. It is recommended to use identical hard drives for all RAID configurations, however, it's possible to combine hard drives of different sizes and makes.

1. Install your hard disk drive(s) in chassis.

2. Connect the Serial ATA hard disk drive to the system power supply using the included *Serial ATA power cable*.
3. Connect one end of the *Serial ATA data cable* to the hard disk drive.

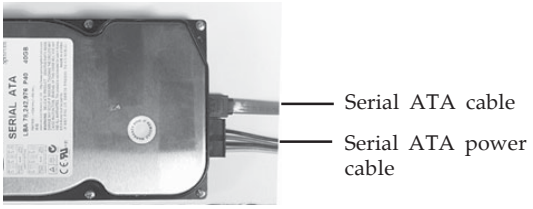


**Figure 2. Hard disk drive connections**

4. Attach the other end of the *Serial ATA data cable* to the Serial ATA connector on the *Serial ATA PCI RAID*.

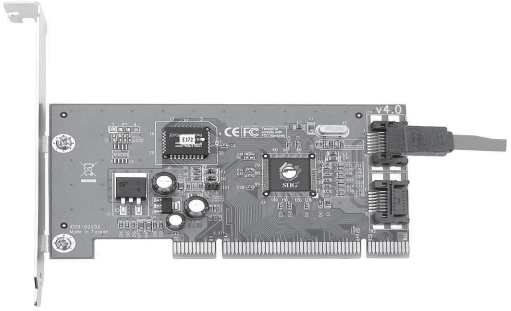

**Figure 3. Connecting the Serial ATA data cable**

5. Follow the same instructions to connect a second hard drive. Device connection is now complete.
6. Replace the computer cover and reconnect the power cord. Go to **RAID Arrays** to configure the RAID BIOS.

## RAID Arrays

RAID arrays are setup in the *Serial ATA PCI RAID* BIOS. Find your RAID set from the table of contents. Follow the steps in the order in which they appear.

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## RAID 0 (Striping)

This RAID array to be used on **New/Blank** hard drives. Striping will destroy existing data on the hard drive.

> **Note:** It is recommended to use **Auto configuration**. For Advanced users or software applications that require a custom **chunk** size, **Manual configuration** is offered.

*For Auto Configuration*

The default **chunk** size is **64k** when selecting **Auto configuration**.

1. As the BIOS boots press **Ctrl+S** or **F4** when prompted to enter the **RAID** BIOS.
2. At the next screen select **Create RAID Set**, then press **Enter**.
3. Select **Striped**, then press **Enter**.
4. Select **Auto configuration**, then press **Enter**.
5. When asked **Are You Sure (Y/N)?**, press **Y** to accept.

6. Press **Ctrl+E** to exit the BIOS.
7. When asked **Are you sure to exit (Y/N)?**, press **Y** to exit and reboot.

*For Manual Configuration*

1. As the BIOS boots press either **Ctrl+S** or **F4** when prompted to enter the **RAID** BIOS.
2. At the next screen select **Create RAID Set**, then press **Enter**.
3. Select **Striped**, then press **Enter**.
4. Select **Manual configuration**, then press **Enter**.
5. Select the **first drive**, press **Enter**.
6. Select the **second drive**, press **Enter**.
7. Select the chunk size, then press **Enter**.
8. When asked **Are You Sure (Y/N)?**, press **Y** to accept.
9. Press **Ctrl+E** to exit the BIOS.
10. When asked **Are you sure to exit (Y/N)?**, press **Y** to exit and reboot.

## RAID 1 (Mirror)

*For New/Blank Hard Drives*

1. As the BIOS boots press **Ctrl+S** or **F4** when prompted to enter the **RAID** BIOS.
2. At the next screen select **Create RAID Set**, then press **Enter**.
3. At the next screen select **Mirrored** then press **Enter**.
4. Select **Auto configuration**, then press **Enter**.
5. When asked **Are You Sure (Y/N)?**, press **Y** to accept.
6. Press **Ctrl+E** to exit the BIOS.
7. When asked **Are you sure to exit (Y/N)?**, press **Y** to exit and reboot.

*For Existing Hard Drives with Data*

1. As the BIOS boots press either **Ctrl+S** or **F4** when prompted to enter the **RAID** BIOS.
2. At the next screen select **Create RAID Set**, then press **Enter**.
3. At the next screen select **Mirrored** then press **Enter**.
4. Select **Manual configuration**, then press **Enter**.
5. Select the Source drive, press **Enter**.
6. Select the Target drive, press **Enter**.
7. At the **Disk Copy** window select **Yes**, then press **Enter**.
8. Select **Offline copy**, then press **Enter**.
9. When asked **Are You Sure (Y/N)?**, press **Y** to begin disk copy.

   **Note:** Disk copy time is dependant on the size of the mirrored set. Do not interrupt disk copy once started.

10. After disk copy completes, press **Ctrl+E** to exit the BIOS.
11. When asked **Are you sure to exit (Y/N)?**, press **Y** to exit and reboot.

## Rebuilding a Failed Mirror Set

When a failure to one member occurs, you will be notified either by the RAID BIOS during boot or by the SATA Raid GUI while in Windows. The steps below will guide you in rebuilding a failed mirror set.

1. Shutdown Windows, replace the failed hard drive, then restart the system.
2. During boot press either **Ctrl+S** or **F4** to enter the **RAID** BIOS.

3. Select **Rebuild Mirror set** then press **Enter**.
4. Select **Offline rebuild** then press **Enter**.
5. When asked **Are You Sure (Y/N)?**, press **Y** to confirm.
6. The mirror will start to rebuild. When rebuilding finishes, press **Ctrl+E** to exit. (Rebuilding can take 30-120 minutes depending on the size of the mirror).
7. When asked **Are you sure to exit (Y/N)?**, press **Y** to exit and reboot.

## Deleting RAID Arrays

1. As the BIOS boots press **Ctrl+S** or **F4** when prompted to enter the **RAID** BIOS.
2. Select **Delete RAID Set**, then press **Enter**.
3. Press **Enter**.
4. When asked **Are You Sure (Y/N)?**, press **Y** to confirm.
5. The RAID set is now deleted.

## Resolving Conflicts

When a RAID set is created, the metadata written to the disk includes drive connection information. If, after a disk failure, the replacement disk was previously part of a RAID set (or used in another system), it may have conflicting metadata. If so, this will prohibit the RAID set from being either created or rebuilt, in order for the RAID set to function properly, this old metadata must be first overwritten with the new metadata. To resolve this, from the main BIOS window select **Resolve Conflicts**, then press **Enter**, the correct metadata, including the correct drive connection information, will be written to the replacement disk.

### Low Level Format

**Low Level Format** is built into the RAID BIOS to make it more convenient to erase the entire contents of a hard disk drive, including data, drive and partition information. The Low Level Format utility works on single hard drives only, before the RAID set is configured.

## Driver Installation

### Windows 7 (32-/64-bit)

*For A New Windows 7 Installation*

1. Setup the RAID array prior to Windows installation.
2. Follow Windows installation procedure.
3. At **Where do you want to install Windows?**, click **Load Driver**.
4. Remove your Windows installation disk and insert the driver CD, then click **Browse**.
5. Double click your **CD Drive ... Drivers**,

   *For 32-bit Windows 7*: Select **Win7**, then click **OK**.

   *For 64-bit Windows 7*: Double click **Win7**, double click **64bit**, select **ext64**, then click **OK**.
6. Select **Silicon Image SiI 3512 SATARaid Controller...**, then click **Next**.
7. At Load Driver window, click **OK**. (skip this step if not prompted)
8. At Where do you want to install Windows?, re-insert your Windows installation disk.
9. Follow the on-screen instructions to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

*For An Existing Windows 7 Installation*

1. Setup the RAID array prior to driver installation and boot up to Windows.
2. Right click **Computer**, click **Manage**, select **Device Manager**.
3. Right click **RAID Controller**, then click **Update driver software**.
4. Insert driver CD, click **Browse my computer for driver software**.
5. For Windows 7 (32-bit): Type **D:\Win7**, then click **Next**. (Change **D:** to match your CD-ROM drive letter)

   For Windows 7 (64-bit): Type **D:\Win7\64bit**, then click **Next**. (Change **D:** to match your CD-ROM drive letter)
6. Click **Install**. Click **Close** to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## To Verify Windows 7 Installation

1. Right click **Computer**, click **Manage**, select **Device Manager**.
2. Double click **Storage controllers**, **Silicon Image Sil 3512 SATARaid Controller** should be displayed.

## Windows Vista (32-/64-bit)

*For a New Windows Vista Installation*

1. Setup the RAID array prior to Windows installation.
2. Follow Windows installation procedure.
3. At **Where do you want to install Windows?**, click **Load Drivers**.

4. Insert the driver CD, click **Browse**.
5. Double click **CD Drive... Drivers**.

   For Vista (32-bit): Click **OK**.

   For Vista (64-bit): Double click **64bit**, click **ext64**, then click **OK**.
6. Select **Silicon Image SiI...**, then click **Next**.
7. Follow the on-screen instructions to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

*For an Existing Windows Vista Installation*

1. Install the board and boot up Windows.
2. At the **Found New Hardware** window, click **Locate and install the driver automatically (recommended)**.
3. Insert the driver CD, click **Continue**.
4. Click **Don't search online**, click **Next**, then click **Close**.
5. Remove the driver CD, shutdown Windows, and setup your RAID array.

When Windows resumes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## To Verify Windows Vista Installation

1. Right click **Computer**, click **Manage**, click **Continue**, select **Device Manager**.
2. Double click **Storage controllers**, **Silicon Image SiI 3512 SATARaid Controller** should be displayed.

## Windows XP (32-bit) / Server 2003 (32-bit)

*For a New Windows XP / Server 2003 Installation*

A new installation requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **Floppy** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Setup the RAID array prior to Windows installation.
2. Follow Microsoft installation procedure to install Windows accordingly.
3. Restart your system when prompted by Windows installation.
4. At the **Windows Setup** screen, press **F6** to install the driver.
5. Insert the driver diskette. Press **S** then press **Enter**.
6. Select **Silicon Image SiI 3x12 SATARaid Controller for Windows XP/Server 2003/Vista** and press **Enter**.
7. Press **Enter** to continue and follow on-screen instructions to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

*For an Existing Windows XP / Server 2003 Installation*

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**.

   *For XP (w/SP1 or earlier)/Server 2003*: Go to step #3.

   *For XP (w/SP2 or later)/Server 2003 (w/ SP1 or later)*: Select **No, not this time**, then click **Next**.
3. Insert driver CD, select **Install the software automatically (Recommended)**, then click **Next**.

> **Note:** Most systems will install the driver automatically after inserting driver CD.

4. Click **Next**, then click **Finish.**
5. Remove the driver CD, shutdown Windows, and setup your RAID array.

When Windows resumes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## Windows XP (64-bit) / Server 2003 (64-bit)

***For a New Windows XP / Server 2003 Installation***

A new installation requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **64bit** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Setup the RAID array prior to Windows installation.
2. Follow Microsoft procedure to install Windows.
3. Restart your system when prompted during Windows' installation.
4. At the **Windows Setup** screen, press **F6** to continue.
5. Insert the driver diskette. Press **S** then press **Enter**
6. Select **Silicon Image SiI... Controller (64-bit Extended)** and press **Enter**.
7. Press **Enter** to continue and follow on-screen instructions to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

***For an Existing Windows XP / Server 2003 Installation***

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**:

   *For XP (w/SP1 or earlier)/Server 2003*: Go to step #3.

   *For XP (w/SP2 or later)/Server 2003 (w/ SP1 or later)*: Select **No, not this time**, then click **Next**.

3. Insert the driver CD, select **Install the software automatically (Recommended)**, then click **Next**.
4. Click **Finish**, remove the driver CD, shutdown Windows, and setup your RAID array.

When Windows resumes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## To Verify Windows XP / Server 2003 Installation

1. Right click **My Computer**, click **Manage**, click **Device Manager**.
2. Double click **SCSI and RAID controllers**, **Silicon Image SiI 3512 SATARaid Controller** should be displayed.

## Windows Server 2008 (32-/64-bit)

*For a New Windows Server 2008 Installation*

1. Setup the RAID array prior to Windows installation.
2. Follow Windows installation procedure.
3. At **Where do you want to install Windows?**, click **Load Drivers**. Insert the driver CD, click **Browse**.
4. Double click your **CD Drive...Drivers**,

   For Server 2008 (32-bit): Click **OK**.

   For Server 2008 (64-bit): Double click **64bit**, click **ext64**, then click **OK**.
5. Select **Silicon Image SiI...**, then click **Next**.
6. Follow instructions to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

*For an Existing Windows Server 2008 Installation*

1. Install the board and boot up Windows.

2. At the **Found New Hardware** window, click **Locate and install the driver sofware (recommended)**.
3. Click **Don't search online**.
4. When prompted, insert the driver CD and Windows will search the CD and install the correct driver.
5. Click **Close** to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## Windows Server 2008 R2

*For A New Windows Server 2008 R2 Installation*

1. Setup the RAID array prior to Windows installation.
2. Follow Windows installation procedure.
3. At **Where do you want to install Windows?**, click **Load Driver**.
4. Remove your Windows installation disk and insert the driver CD, then click **Browse**.
5. Double click **CD Drive... Drivers**, double click **Win7**, double click **64bit**, select **ext64**, then click **OK**.
6. Select **Silicon Image SiI 3512 SATARaid Controller...**, then click **Next**.
7. At Load Driver window, click **OK**. (skip this step if not prompted)
8. At Where do you want to install Windows?, re-insert your Windows installation disk.
9. Follow the on-screen instructions to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

*For An Existing Windows Server 2008 R2 Installation*

1. Setup the RAID array prior to driver installation and boot up to Windows.
2. Right click **Computer**, click **Manage**, select **Device Manager**.
3. Right click **RAID Controller**, then click **Update driver software**.
4. Insert driver CD, click **Browse my computer for driver software**.
5. Type **D:\Win7**, then click **Next**. (Change **D:** to match your CD-ROM drive letter)
6. Click **Install**. Click **Close** to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## To Verify Windows Server 2008 Installation

1. Right click **Computer**, click **Manage**, double click **Diagnostics**, select **Device Manager**.
2. Double click **Storage controllers**. **Silicon Image SiI 3512 SATARaid Controller** should be displayed.

## Windows 2000

A new installation of Windows 2000 requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **Floppy** folder, found on the driver CD, onto a blank floppy disk then follow the directions starting on the next page.

*For a New Windows 2000 Installation*

1. Setup the RAID array prior to Windows installation.
2. Follow Microsoft Windows 2000 installation procedure.

3. Restart the computer when prompted by the installation.
4. At the **Windows 2000 Setup** screen, press **F6**.
5. When prompted press **S** to specify the location of the driver.
6. Insert the driver diskette, then press **Enter**.
7. Select **Silicon Image SiI 3x12 SATARaid Controller for Windows NT 4.0 and 2000**, then press **Enter**.
8. Press **Enter** to finish driver installation, then follow the on-screen instructions to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

*For an Existing Windows 2000 Installation*

1. Install the board and boot up to Windows.
2. At the **Found New Hardware Wizard**, click **Next**.
3. Select **Search for a suitable driver for my device (recommended),** then click **Next**.
4. Insert the driver CD, check **CD-ROM drives**, uncheck the other check boxes, click **Next**, click **Next** again.
5. Click **Finish**. Remove the driver CD, shutdown Windows, and setup your RAID array.

When Windows resumes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## To Verify Windows 2000 Installation

1. Right click **My Computer**, click **Manage**, click **Device Manager**.
2. Double click **SCSI and RAID controllers**, **Silicon Image SiI 3512 SATARaid Controller** should be displayed.

## Windows ME

*For a New Windows ME Installation*

1. Setup the RAID array prior to Windows installation.
2. Follow Microsoft Windows installation procedure.
3. Once Windows has installed, right click **My Computer**, click **Properties**, click **Device Manager**.
4. Double click **PCI RAID Controller** listed under **Other Devices**.
5. Select **Driver** tab and click **Update Driver** button.
6. Insert the driver CD, select **Automatic search for a better driver (Recommended)**, then click **Next**.
7. Accept the default entry, then click **OK**.
8. Click **Finish**, remove the driver CD, then restart Windows to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

*For an Existing Windows ME Installation*

1. Install the board and boot up to Windows.
2. At the **Add New Hardware Wizard**, insert the driver CD.
3. Select **Automatic search for a better driver (Recommended)**, then click **Next**.
4. Accept the default entry then click **OK**.
5. Click **Finish**.
6. Remove the driver CD, shutdown Windows, and setup your RAID array.

When Windows resumes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

## Windows 98SE

*For a New Windows 98SE Installation*

1. Setup the RAID array prior to Windows installation.
2. Follow Microsoft Windows installation procedure.
3. Once Windows has installed, right click **My Computer**, click **Properties**, click **Device Manager**.
4. Double click **PCI RAID controller** listed under **Other Devices**.
5. Select **Driver** tab, then click **Update Driver** button.
6. Insert the driver CD, then click **Next**.
7. Select **Search for the better driver ...** and click **Next**.
8. Check **CD-ROM drive,** uncheck the other boxes**,** then click **Next**. Click **Next** again, then **Finish**.
9. Remove the driver CD, then restart Windows to complete the installation.

When Windows installation completes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.M

*For an Existing Windows 98SE Installation*

1. Install the board and boot up to Windows.
2. At the **Add New Hardware Wizard**, click **Next** to continue.
3. Select **Search for the best driver for your device** option then click **Next**.
4. Insert the driver CD, check **CD-ROM drive**, uncheck the other check boxes, then click **Next**.
5. Click **Next,** then **Finish**.
6. Remove the driver CD, shutdown Windows, and setup your RAID array.

When Windows resumes, go to **Installing SATARaid GUI** on page 20 and install the RAID utility.

### To Verify Windows ME / 98SE Installation

1. Right click **My Computer** and click **Properties**. Select **Device Manager** tab.
2. Double click **SCSI controllers**, **Silicon Image Sil 3512 SATARaid Controller** should be displayed.

## Installing SATARaid GUI

The SATARaid GUI provides the user an easy way to monitor and configure your RAID array.

*For Windows 7*

1. Place the driver CD into the CD-ROM drive.

   At the AutoPlay window: click **Open folder to view files**.

   If the AutoPlay window does not start: double click **Computer**, double click your **CD-ROM** drive.
2. Double click **GUI** folder, double click **Win7** folder.
3. Double click **Setup**, click **Yes**.
4. Follow the onscreen instructions to complete the installation.

> **Note**: Everytime **SATARAID** starts, click **Yes** at User Account Control to enable it.

*For Windows Vista*

1. Place the driver CD into the CD-ROM drive.

   At the AutoPlay window: click **Open folder to view files**.

   If AutoPlay does not start: double click **Computer**, double click your **CD-ROM** drive.
2. Double click **GUI** folder, double click **Vista** folder.

3. Double click **InstallSATARaid**, click **Allow**. Follow the onscreen instructions to complete.
4. Double click **vcredist_x86**, click **Continue**. Follow the onscreen instructions to complete.
5. Go back to the desktop, click **Start**, **All Programs**, **Startup**.
6. Right click **SATARaid**, click **Properties**.
7. Click the **Compatibility** tab, check **Run this program as an administrator**, then click **OK**.

> **Note**: Due to security measures in Windows Vista, the SATA Raid GUI is blocked form starting up. Go to **Unblocking Startup Programs**, on page 22, to enable the SATARaid GUI.

*For Windows Server 2008 R2*

1. Place the driver CD into the CD-ROM drive.
2. Click **Start**, in the **Start Search** box, type **D:\Gui\Win7\Setup**, then press **Enter**. (Change **D:** to match your CD-ROM drive letter)
3. Click **Yes**. Follow the on screen instructions to complete the installation.

*For Windows XP / Server 2003 & 2008 / 2000 / ME / 98SE*

1. Place the driver CD into the CD-ROM drive.
2. At the Windows desktop click **Start**, then **Run**.
3. Type **D:\GUI\Java SATARaid.exe**, then click **OK**. Follow the on-screen instructions to complete the installation (Change **D:** to match your CD-ROM drive letter)
4. At the Windows desktop click **Start**, then **Run**.

5. Type **D:\GUI\jre-1_5_0_05.exe**, then click **OK**. (Change **D:** to match your CD-ROM drive letter)
6. Follow the on-screen instructions to complete the installation.

## Unblocking Startup Programs

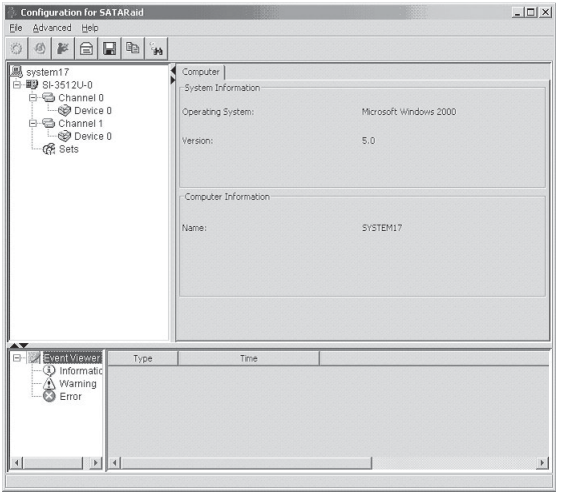
The SATARaid GUI is blocked from starting up, follow the steps below to enable it.

### For Windows Vista

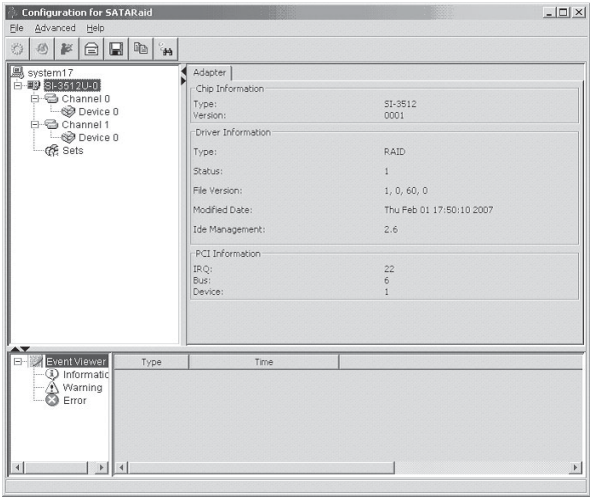
1. Click the **Blocked startup programs** icon located in the taskbar by the system clock.
2. Click **Run blocked program**, **SATARaid**.
3. Click **Allow**.

## Using SATARaid GUI

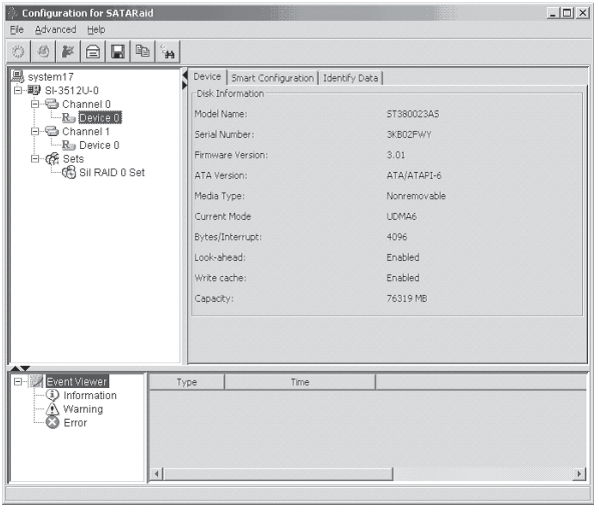
During the installation process, the SATARaid GUI was saved in the Windows Startup folder, a small blue SATARaid icon will appear in the right-hand corner of taskbar. To launch the GUI, simply click on the icon or right click icon and choose **Open**. Upon launching the GUI, the information displayed will be similar, however, the windows which identifies the computer running SATARaid may look different than what is shown in the following pages.



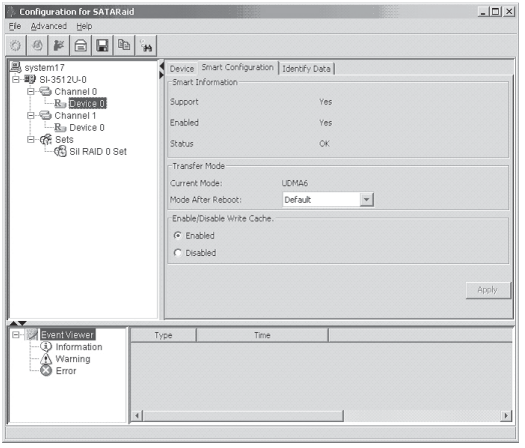
Selecting each different component in the configuration tree provides specific information for that component, such as the chip.

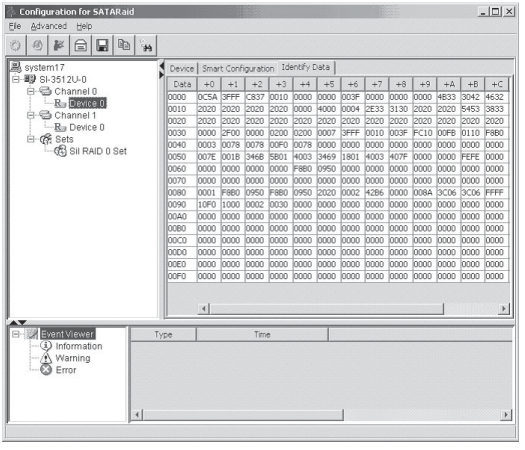



By selecting a specific channel the following information is reported.

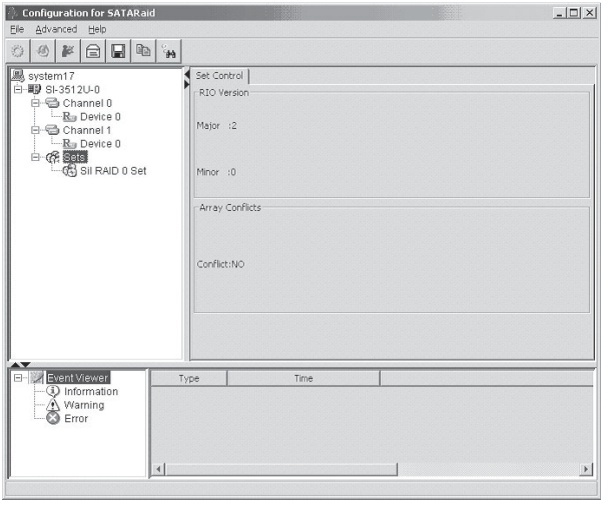


Selecting a specific drive reports all pertinent information to that drive, including Configuration and Disk Identification information.

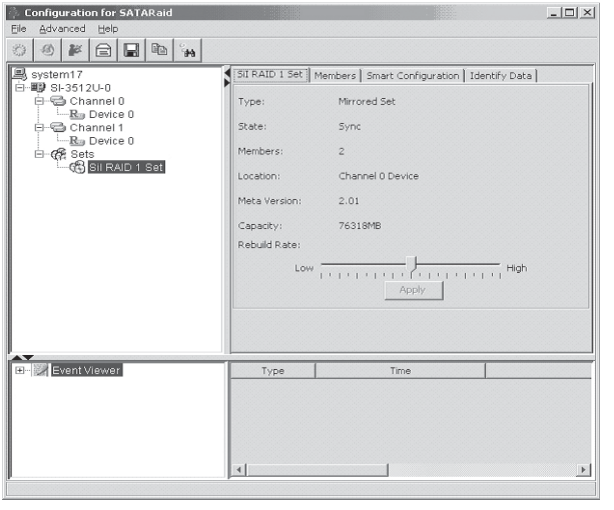


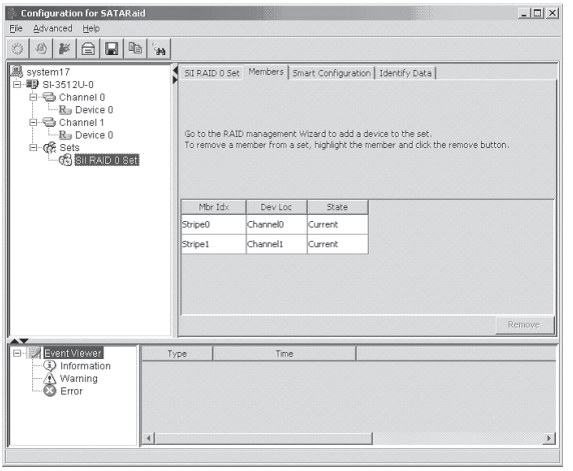
Selecting Sets reports on active RAID sets.



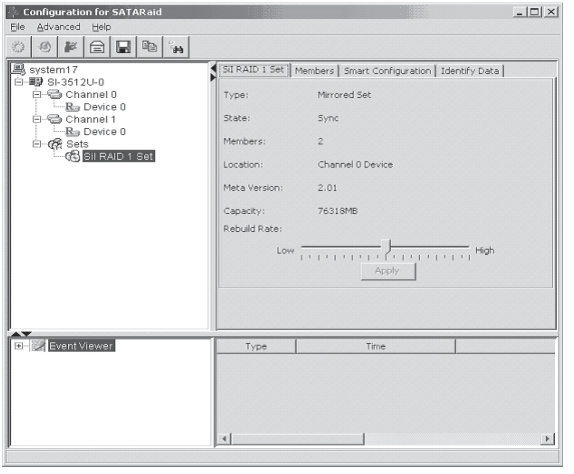

By selecting the specific RAID set, such as Set 1 which is a Mirrored Set, the type of RAID set, the number of members and capacity is reported.



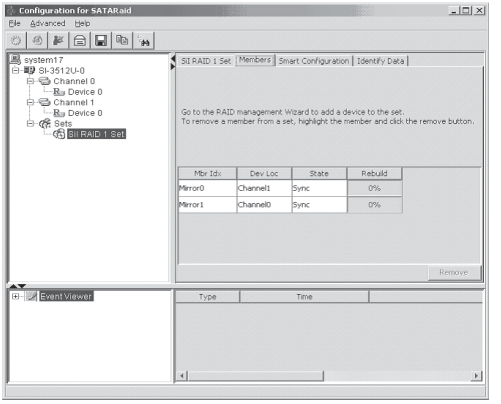
The Members tab reports the device identification (corresponding with the information in the BIOS) and the state of each device.



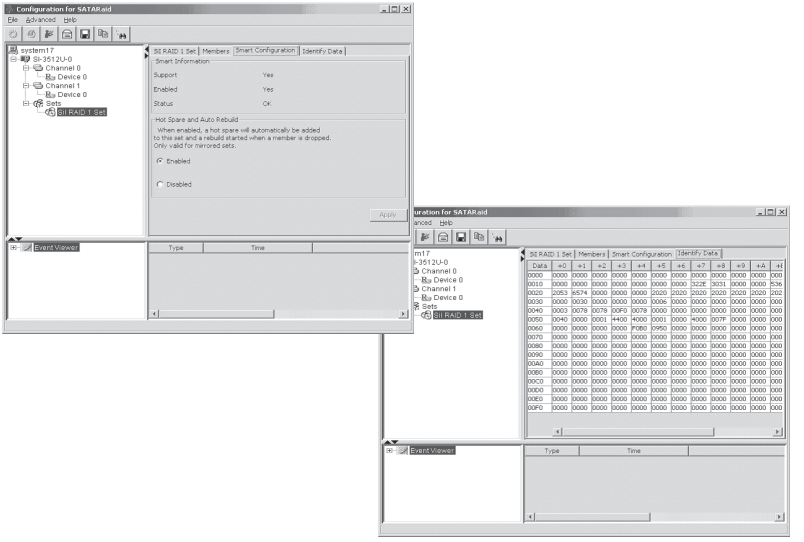

Besides reporting information, the Members tab of a Mirrored Set allows the user to remove a specific drive from that set. However, a drive cannot be removed from a stripe set as this would destroy all the data.



The device identification, along with the state of each device is also reported in the Members tab window. Note that when a Mirror set is first created, the state of the "destination" drive may report as Rebuild for as much as 30-90 minutes depending on the size of the disk.


Configuration for SATARaid
File Advanced Help
system17
SI-3512U-0
Channel 0
Device 0
Channel 1
Device 0
Sets
SI RAID 1 Set
SI RAID 1 Set | Members | Smart Configuration | Identify Data
Go to the RAID management Wizard to add a device to the set.
To remove a member from a set, highlight the member and click the remove button.
Mbr Idx | Dev Loc | State | Rebuild
Mirror0 | Channel1 | Sync | 0%
Mirror1 | Channel0 | Sync | 0%
Remove
Event Viewer
Type | Time

SMART and Configuration information, as well as Data Identification is again provided for each Set.

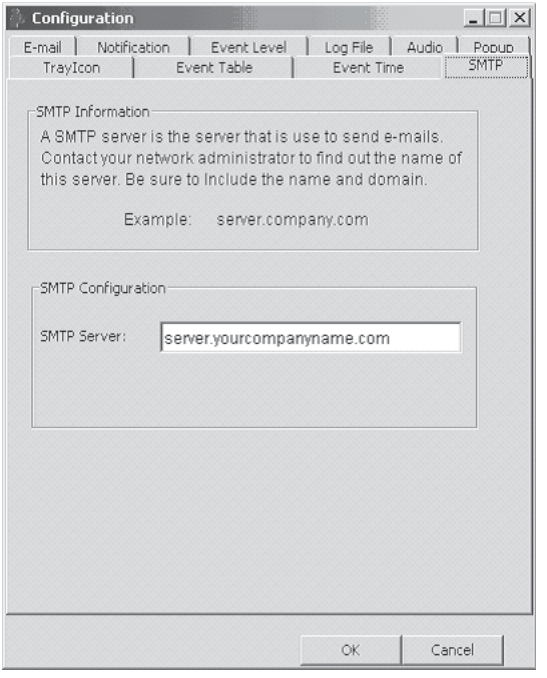

Configuration for SATARaid
SI RAID 1 Set | Members | Smart Configuration | Identify Data
Smart Information
Support Yes
Enabled Yes
Status Ok
Hot Spare and Auto Rebuild
When enabled, a hot spare will automatically be added to this set and a rebuild started when a member is dropped.
Only valid for mirrored sets.
Enabled
Disabled
Apply
Event Viewer
Type | Time

## Configuration Menu

With the SATARaid GUI running, the small SATARaid icon should appear in the bottom right of the computer screen, next to the clock. By right-clicking on the icon and clicking **Configure** the user may configure SATARaid including customizing the settings for SMTP, E-mail, Notification, Event Level, Log File, Audio, Popup, TrayIcon, Event Table and Event Time.

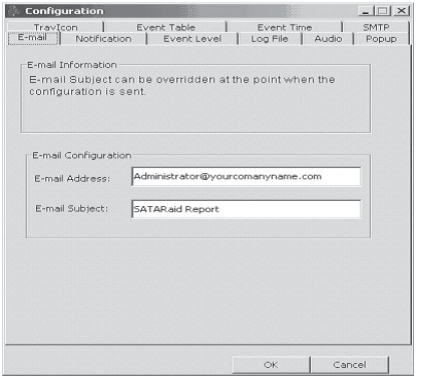
### SMTP

The SMTP server is the server that is used to send e-mails. Normally, the network administrator knows what this name is. Both the name and domain must be entered.



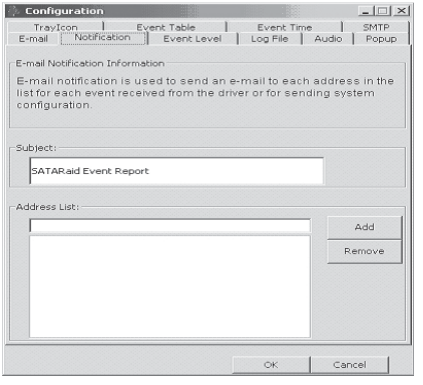
## E-Mail

Using the E-mail tab in the Configuration Menu, the user may set the default E-mail address and subject line to where the configuration should be sent. This, however, can be overridden at the time of sending the E-mail.



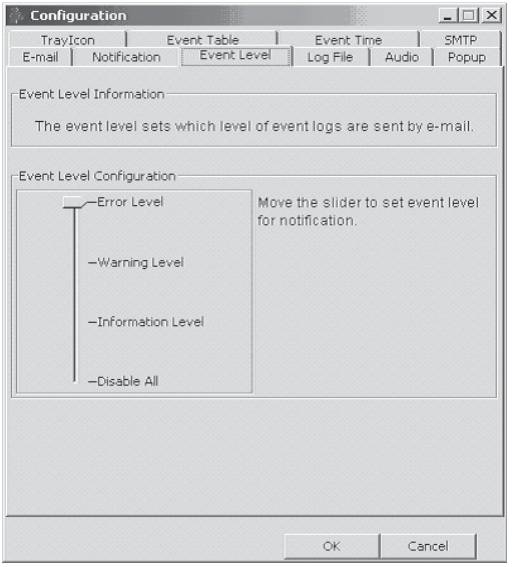

## Notification

When different types of events occur, SATARaid may be configured to send notices to assigned individual E-mail addresses. Using the Notification tab, all E-mail addresses desired to receive the notices may be entered.



## Event Level

There are different types of E-mail notifications that may be sent which are set with the Event Level tab.




**The different levels are:**

**Disabled** - No event logs will be sent

**Informational** - The following events will be sent:

- Informational
- Warnings
- Errors

**Warning** - The following events will be sent:

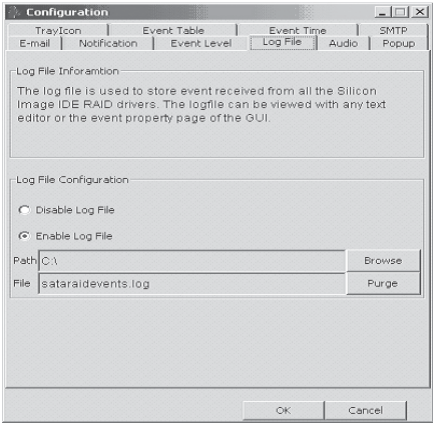
- Warnings
- Errors

**Errors** - The following events will be sent:

- Errors

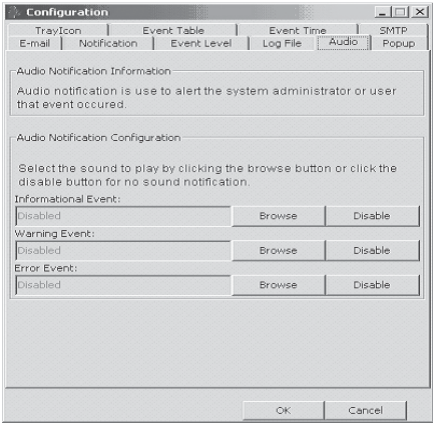
## Log File

The log file is used to store event information received from all the RAID drivers. The log file is a text file and can be viewed with Notepad or the SATARaid GUI. Use the Log File tab to set where the log file should be stored and the name of the file as well.



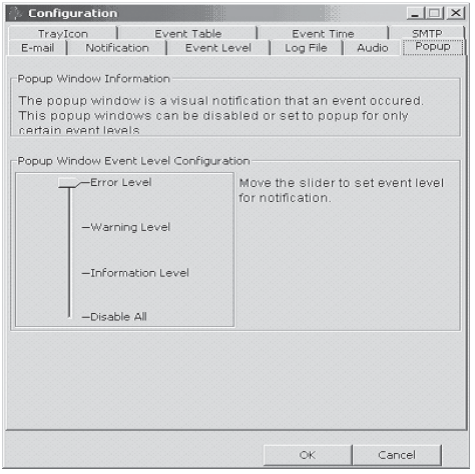

## Audio

The user may set different audio alerts for the different levels of events.



## Popup

The popup window is a visual notification that an event occurred. The popup window can be disabled or set to popup for only certain event levels.




**The different levels are:**

**Disabled** - No popup will occur

**Informational** - The popup window will be displayed for the following events:

- Informational
- Warnings
- Errors

**Warning** - The popup window will be displayed for the following events:

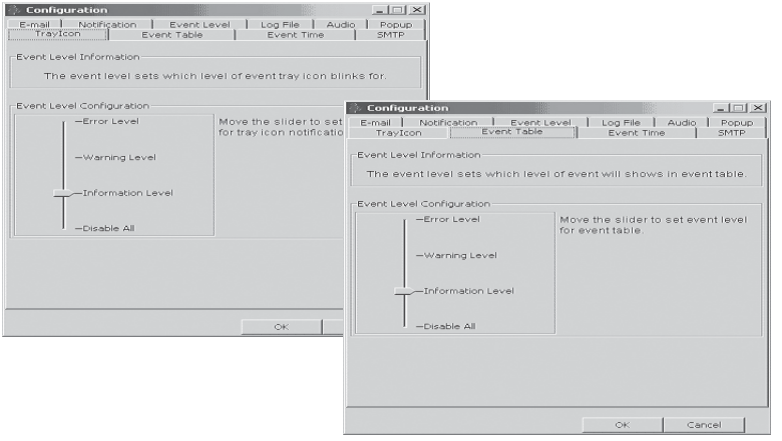
- Warnings
- Errors

**Errors** - The popup window will be displayed for the following events:

- Errors

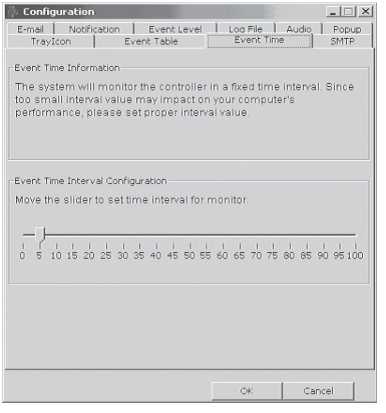
## TrayIcon and Event Table (except Windows 7 / Vista / Server 2008 R2)

The TrayIcon sets which level of events the tray icon will blink for and the Event Table sets which level of events will show in the event table.




## Event Time (except Windows 7 / Vista / Server 2008 R2)

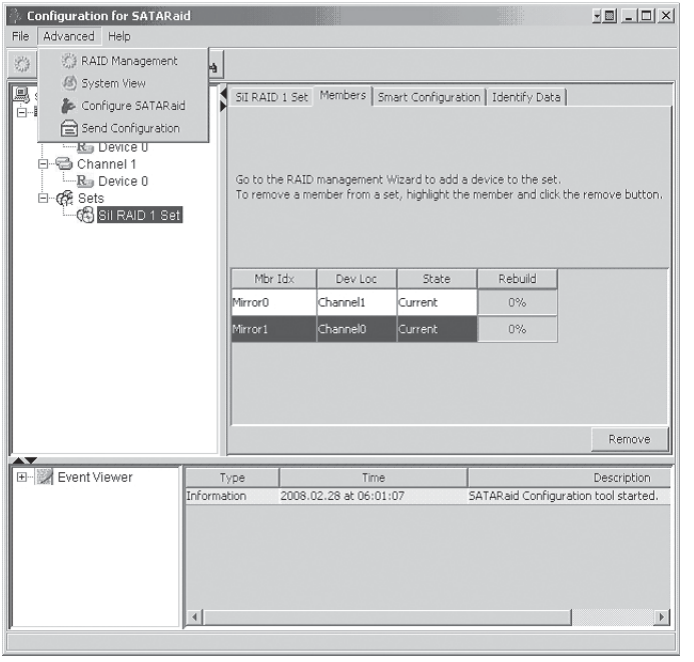
The system will monitor the controller in a fixed time interval. Since to small of an interval may impact your computer's performance, please set the proper interval value.


Configuration
E-mail
Notification
Event Level
Log File
Audio
Popup
TrayIcon
Event Table
Event Time
SMTP
Event Time Information
The system will monitor the controller in a fixed time interval. Since too small interval value may impact on your computer's performance, please set proper interval value.
Event Time Interval Configuration
Move the slider to set time interval for monitor.
0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
OK
Cancel

# Menu Commands

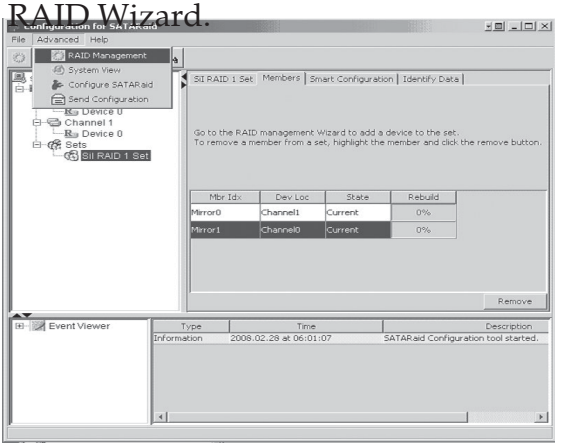
## Advanced Menu (except Windows 7 / Vista / Server 2008 R2)

Under the Advanced Menu you can create, delete, modify your RAID array, and create and delete a Spare Drive in addition to System View, Configuring SATARaid and Send Configuration via email as discussed earlier.



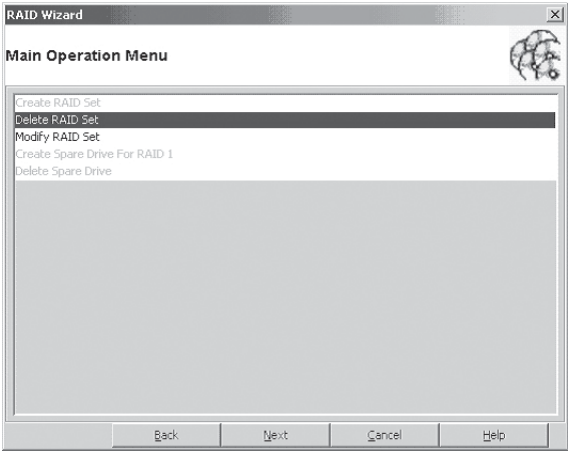
## RAID Management (except Windows 7 / Vista / Server 2008 R2)

In RAID Management you can create, delete, modify your RAID array, and create and delete a Spare Drive using the RAID Wizard.



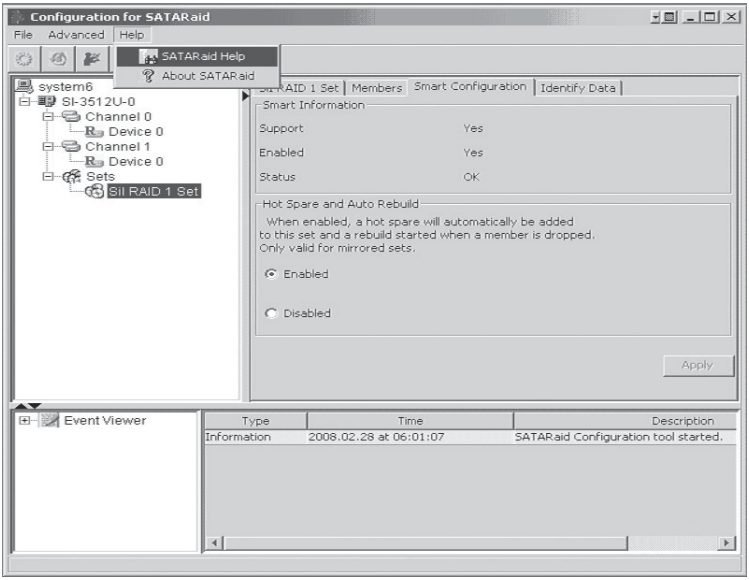

## RAID Wizard

Select your option, click Next and follow the on screen instructions. Options not related to your RAID array will be greyed out.



## SATA RAID Help Menu (except Windows 7 / Vista / Server 2008 R2)

The SATARaid Help menu gives detailed information on features and benefits and RAID functions to help you get the most out of the *Serial ATA PCI RAID* controller.



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# Technical Support and Warranty

**QUESTIONS?** SIIG's **Online Support** has answers! Simply visit our web site at ***www.siig.com*** and click **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analysts will promptly respond.

SIIG offers a lifetime manufacturer warranty with this product. Please see our web site for more warranty details. If you encounter any problems with this product, please follow the procedures below.

A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

**Step 1:** Submit your RMA request.

Go to **www.siig.com**, click **Support**, then **RMA** to submit a request to SIIG RMA. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

**Step 2:** After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping. Ship the product to the following address:

  **SIIG, Inc.**
  **6078 Stewart Avenue**
  **Fremont, CA 94538-3152, USA**
  **RMA#:** _____

- SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

## About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/ Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. All centered around the distribution and switching of A/V signals over CAT5/6, these products include matrix switches, distribution amplifiers, extenders, converters, splitters, cabling, and more.

SIIG is the premier one-stop source of upgrades and is committed to providing high quality products while keeping economical and competitive prices. High-quality control standards are evident by one of the lowest defective return rates in the industry. Our products offer comprehensive user manuals, user-friendly features, and most products are backed by a lifetime warranty.

SIIG products can be found in many computer retail stores, mail order catalogs, and e-commerce sites in the Americas, as well as through major distributors, system integrators, and VARs.

**PRODUCT NAME**

Serial ATA PCI RAID

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

**FCC COMPLIANCE STATEMENT:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG, Inc.
6078 Stewart Avenue
Fremont, CA 94538-3152, USA
Phone: 510-657-8688

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